

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 82-45

NPDES PERMIT NO. CA0038024

AN ORDER AMENDING ORDER NO. 79-48,  
WASTE DISCHARGE REQUIREMENTS FOR

FAIRFIELD SUISUN SEWER DISTRICT  
SOLANO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter the Board) finds that:

1. On May 19, 1979, this Regional Board adopted Order No. 79-48 prescribing waste discharge requirements (NPDES No. CA0038024) for Fairfield-Suisun Sewer District (hereinafter the discharger).
2. Discharge Prohibition C.2 of Order No. 79-48 prohibits discharge of wastewater in excess of 10.35 million gallons per day (mgd) average dry weather flow. The discharger completed expansion of existing facilities in April, 1982, and has submitted documentation that the improved facilities have a design capacity of 15.6 mgd. Provision D.5 of said Order provides that the Board will consider modifying the flow limitation of Prohibition C.2 only after the discharger documents a binding commitment to provide disposal facilities adequate to comply with Prohibition C.3.
3. Discharge Prohibition C.3 of Order No. 79-48 prohibits discharge of waste to receiving waters from May 2 through September 21 of each year and requires the discharger to minimize to the extent feasible discharge of waste from September 22 through December 1 and from March 2 through May 1 of each year. This prohibition conformed to the Basin Plan, adopted in April 1975, which specifically prohibited discharge of wastewater to Suisun Marsh during the dry weather period of the year.
4. Provision D.3. of Order No. 79-48 required the discharger to complete treatment and reuse facilities by April 1, 1981, and to achieve full compliance with Discharge Prohibition C.3. of said Order by May 1, 1981. The discharger has completed construction of needed treatment facilities but not the distribution facilities needed for land application of the existing plant flow, primarily due to planning and contractual problems associated with distribution of reclaimed wastewater. It is now estimated that facilities necessary to distribute the 12 mgd that Solano Irrigation District is contractually obligated to accept, will be available by August 1, 1983.

5. On July 21, 1982, this Regional Board revised the Basin Plan to prohibit discharge of any wastewater which has particular characteristics of concern to beneficial uses to Suisun Marsh during the dry weather period of the year. The revised Basin Plan provides that exceptions to this prohibition will be considered for discharges where:

- a) An inordinate burden would be placed on the discharger relative to beneficial uses protected and an equivalent level of environmental protection can be achieved by alternate means such as an alternative discharge site, a higher level of treatment, and/or improved treatment reliability; or
- b) A discharge is approved as part of a reclamation project; or
- c) It can be demonstrated that net environmental benefits will be derived as a result of the discharge.

It further provides that: Significant factors to be considered by the Regional Board in reviewing requests for exceptions will be the reliability of the discharger's system in preventing inadequately treated wastewater from being discharged to the receiving water and the environmental consequences of such discharges.

6. The discharger has requested that an exception to the Suisun Marsh dry weather discharge prohibition be considered by the Board, and proposes to discharge into the Marsh flows in excess of the 12 mgd to be reclaimed. This request is based upon the discharger's proposal to:

- a. Provide protection to the marsh against treatment plant upset by means of a combination of treatment unit redundancy and wastewater storage measures. About 5 days storage capacity at design flow (15.6 mgd) would be provided.
- b. Minimize receiving water pollutant concentrations by discharge into the Marsh via the about three mile long Boynton-Cordelia Ditch which will provide dilution of wastewater by means of tidal action and a gate system. Although dilution may be significant at the early stage of the project, a dilution ratio of 10:1 will eventually not be achieved.
- c. Provide a freshwater marsh as environmental enhancement to compensate for potential adverse impacts of prolonged dry weather discharge. About 30 acres of marsh would eventually be provided.
- d. Continue to provide effluent during the October to May period to assist in optimizing growth of waterfowl food plants in managed duck ponds of the Marsh.

7. Discharge Prohibition C.4. of Order No. 79-48 prohibits discharge at any point at which the wastewater does not receive an initial dilution of at least 10:1. The revised Basin Plan provides that exceptions to this prohibition will be considered in accordance with the criteria in Finding 5.
8. The proposed measures identified in Finding 6 provide reasonable reliability features preventing discharge of inadequately treated wastewater, and, in addition, constitute net environmental benefits. Therefore, an exception to the dry weather discharge prohibition for flows in excess of 12 mgd, and to the 10:1 minimum dilution requirement, is justified.
9. The amendment of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.
10. The Board has notified the discharger and interested agencies and persons of its intent to revise waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
11. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED THAT Order No. 79-48 is amended as follows:

1. Discharge Prohibition C.2 is amended to read:

"The discharge of wastewater in excess of 15.6 mgd average dry weather flow is prohibited. Average shall be determined over three consecutive months."

2. Discharge Prohibition C.3 is amended to read:

"The discharge of waste to receiving waters is prohibited, except for flows in excess of a flow rate of 12.0 mgd, from May 2 through September 21 of each year. Discharges to receiving waters shall be minimized to the extent feasible from September 22 through December 1 and March 2 through May 1 of each year."

The exemption to this discharge prohibition shall become effective only if the State Board approves the proposed Basin Plan amendment, as described in Finding 5 above, and adopted by the Regional Board on July 21, 1982.

3. Discharge Prohibition C.4 is deleted.

4. Provision D.3 is amended to read:

"The discharger shall achieve compliance with Discharge Prohibition C.3 by August 1, 1983, and submit a Report of Compliance by August 15, 1983."

5. Provision D.12 is added to read:

"The discharger shall provide facilities for maximum feasible dilution of wastewater discharged to waterways of Suisun Marsh by October 1, 1984 and submit a report, satisfactory to the Executive Officer, by October 15, 1984."

6. Provision D.13 is added to read:

"The discharger shall provide facilities to protect the marsh against the discharge of inadequately treated waste caused by treatment plant upset by October 1, 1984 and submit a report, satisfactory to the Executive Officer, by October 15, 1984."

7. Provision D.14 is added to read:

"The discharger shall provide environmental enhancement facilities to justify the exception to the Basin Plan discharge prohibitions granted in Finding 8 above relative to dry weather discharge and minimum dilution, or shall provide facilities that assure reliable long term compliance with the prohibitions according to the following schedule:

<u>Task</u>	<u>Task Completion</u>	<u>Report Due</u>
a. Complete First Stage Marsh (7.5 acres) or submit report indicating how long term prohibition compliance will be assured	October 1, 1984	October 15, 1984
b. Submit time schedule for expanding marsh (22.5 acres)"	When plant flow reaches 15.0 mgd	

8. Provision D.15 is added to read:

"It is the Board's intent to modify the compliance schedules established by Provisions D.12, D.13 and D.14, if needed, in order to enable coordination of construction with the California Department of Water Resources Suisun Marsh Protection Facilities."

9. Provision D.16 is added to read:

"The discharger shall submit a marsh operations manual, satisfactory to the Executive Officer, prior to commencement of marsh construction and shall further submit an analysis of the first year of marsh operations and performance within 15 months after marsh establishment."

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 21, 1982.

FRED H. DIERKER  
Executive Officer

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